

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/549,831

Source: Pcr/10

Date Processed by STIC: 10/3/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 10/03/2005

PATENT APPLICATION: US/10/549,831

TIME: 14:30:43

Input Set : A:\S80668522.ST25.txt

Output Set: N:\CRF4\10032005\J549831.raw

3 <110> APPLICANT: Children's Cancer Institute Australia for Medical Research
 5 <120> TITLE OF INVENTION: DETERMINING DRUG RESISTANCE
 7 <130> FILE REFERENCE: S80668522:TG
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/549,831
 C--> 9 <141> CURRENT FILING DATE: 2005-09-16
 9 <150> PRIOR APPLICATION NUMBER: 2003901239
 10 <151> PRIOR FILING DATE: 2003-03-18
 12 <160> NUMBER OF SEQ ID NOS: 10
 14 <170> SOFTWARE: PatentIn version 3.2
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 1845
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Homo sapiens
 21 <400> SEQUENCE: 1
 22 atggaagaag agatcgccgc gctggtcatt gacaatggct ccggcatgtg caaagctggt 60
 24 tttgctgggg acgacgctcc ccgagccgtg tttccttcca tcgtcgggcg cccagacac 120
 26 cagggcgctca tgggtgggcat gggccagaag gactcctacg tgggcgacga ggcccagagc 180
 28 aagcgtggca tcttgaccct gaagtacccc attgagcatg gcacgctcac caactgggac 240
 30 gacatggaga agatctggca ccacaccttc tacaacgagc tgcgcgtggc cccggaggag 300
 32 caccagtgct tgctgaccga ggccccctg aaccccaagg ccaacagaga gaagatgact 360
 34 cagattatgt ttgagacctt caacaccccc gccatgtacg tggccatcca ggccgtgctg 420
 36 tccctctacg cctctgggcg caccactggc attgtcatgg actctggaga cggggtcacc 480
 38 cacacggtgc ccatctacga gggctacgcc ctccccacg ccatcctgcg tctggacctg 540
 40 gctggccggg acctgaccca ctacctcatg aagatcctca ctgagcgagg ctacagcttc 600
 42 accaccacgg ccgagcggga aatcgtgcgc gacatcaagg agaagctgtg ctacgtcgcc 660
 44 ctggacttcg agcaggagat ggccaccgcc gcacccctct cttctctgga gaagagctac 720
 46 gagctgcccc atggccaggc catcaccatt ggcaatgagc ggttcgggtg tccggaggcg 780
 48 ctgttccagc ctctctctct gggatggaa tcttgccgca tccacgagac caccttcaac 840
 50 tccatcatga agtgtgacgt ggacatccgc aaagacctgt acgccaacac ggtgctgtcg 900
 52 ggcggcacca ccatgtaccc gggcattgcc gacaggatgc agaaggagat caccgccctg 960
 54 gcgcccagca ccatgaagat caagatcatc gcacccccag agcgcaagta ctcggtgtgg 1020
 56 atcggtggct ccatcctggc ctcaactgtc accttcagc agatgtggat tagcaagcag 1080
 58 gactacgacg agtcgggccc ctccatcgct caccgcaaag gcttctaaac ggactcagca 1140
 60 gatgcgtagc atttctgtga tgggttaatt gagaatagaa atttgccctt ggcaaatgca 1200
 62 cacacctcat gctagcctca cgaaactgga ataagccttc gaaaagaaat tgtccttgaa 1260
 64 gcttgtatct gatatcagca ctggattgta gaacttggtg ctgattttga ccttgatttg 1320
 66 aagttaactg tcccccttgg tatttgttta atacctgta catatctttg agttcaacct 1380
 68 ttagtacgtg tggtctgggc acttcgtggc taaggtaaga acgtgcttgt ggaagacaag 1440
 70 tctgtggctt ggtgagctg tgtggccagc agcctctgat ctgtgcaggg tattaacctg 1500
 72 tcagggtgta gtgttctggg atttctctag aggtggcaa gaaccagttg ttttgtcttg 1560
 74 cgggtctgtc agggttggaa agtccaagcc gtaggaccca gtttccttct ttagctgatg 1620
 76 tctttggcca gaacaccgtg ggctgttact tgctttgagt tgggaagcgg ttgcatttac 1680
 78 gcctgtaaat gtattcattc ttaatttatg taaggttttt tttgtacgca attctcgatt 1740

RAW SEQUENCE LISTING

DATE: 10/03/2005

PATENT APPLICATION: US/10/549,831

TIME: 14:30:43

Input Set : A:\S80668522.ST25.txt

Output Set: N:\CRF4\10032005\J549831.raw

```

80 ctttgaagag atgacaacaa attttggttt tctactgtta tgtgagaaca ttaggccccca 1800
82 gcaacacgtc attgtgtaag gaaaaataaa agtgctgccg taacc 1845
85 <210> SEQ ID NO: 2
86 <211> LENGTH: 1845
87 <212> TYPE: DNA
88 <213> ORGANISM: Homo sapiens
90 <400> SEQUENCE: 2
91 atggaagaag agatcgccgc gctgggtcatt gacaatggct ccggcatgtg caaagctggt 60
93 tttgctgggg acgacgctcc ccgagccgtg ttctcttcca tcgtcgggcg cccagacac 120
95 cagggcgctca tgggtgggcat gggccagaag gactcctacg tgggcgacga ggcccagagc 180
97 aagcgtggca tcctgaccct gaagtacccc attgagcatg gcatcgtcac caactgggac 240
99 gacatggaga agatctggca ccacaccttc tacaacgagc tgcgcgtggc cccggaggag 300
101 caccatttgc tgctgaccga ggccccctcg aacccaagg ccaacagaga gaagatgact 360
103 cagattatgt ttgagacctt caacaccccg gccatgtacg tggccatcca ggccgtgctg 420
105 tccctctacg cctctgggcg caccactggc attgtcatgg actctggaga cggggtcacc 480
107 cacacgggtg ccactacga gggctacgcc ctccccacg ccactctgcg tctggacctg 540
109 gctggccggg acctgaccga ctacctcatg aagatcctca ctgagcgagg ctacagcttc 600
111 accaccacgg ccgagcggga aatcgtgcgc gacatcaagg agaagctgtg ctacgtcgcc 660
113 ctggacttcg agcaggagat ggccaccgcc gcactcctct ctctctgga gaagagctac 720
115 gagctgcccg atggccaggc catcaccatt ggcaatgagc ggttcgggtg tccggaggcg 780
117 ctggtccagc ctctctctct ggggtatggaa tcttgccgca tccacgagac caccttcaac 840
119 tccatcatga agtgtgacgt ggacatccgc aaagacctgt acgccaacac ggtgctgtcg 900
121 ggccggacca ccattgacct gggcattgcc gacaggatgc agaaggagat caccgcctcg 960
123 gcgcccagca ccattgaagt caagatcatc gcacccccag agcgcaagta ctcggtgtgg 1020
125 atcggtggct ccactctggc ctcaactgtc accttccagc agatgtggat tagcaagcag 1080
127 gagtacgacg agtcgggccc ctccatcgtc caccgcaaat gcttctaaac ggactcagca 1140
129 gatgcgtagc atttgctgca tgggttaatt gagaatagaa atttgccct ggcaaagtga 1200
131 cacacctcat gctagcctca cgaaactgga ataagccttc gaaaagaaat tgccttgaa 1260
133 gcttgatatc gatatcagca ctggattgta gaacttggtg ctgattttga ccttgattg 1320
135 aagttaactg ttccccttgg tatttgttta atacctgta catatctttg agttcaacct 1380
137 ttagtacgtg tggcttggtc acttcgtggc taaggtaaga acgtgcttgt ggaagacaag 1440
139 tctgtggctt ggtgagctg tgtggccagc agcctctgat ctgtgcaggg tattaacctg 1500
141 tcagggctga gtgttctggg atttctctag aggctggcaa gaaccagttg ttttgtcttg 1560
143 cgggtctgtc aggggttgaa agtccaagcc gtaggacca gtttctttc ttagctgatg 1620
145 tctttggcca gaacaccgtg ggctgttact tgctttgagt tggagcggt ttgcatttac 1680
147 gcctgtaaat gtattcattc ttaatttatg taaggttttt tttgtacgca attctcgatt 1740
149 ctttgaagag atgacaacaa attttggttt tctactgtta tgtgagaaca ttaggccccca 1800
151 gcaacacgtc attgtgtaag gaaaaataaa agtgctgccg taacc 1845
154 <210> SEQ ID NO: 3
155 <211> LENGTH: 1845
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
159 <400> SEQUENCE: 3
160 atggaagaag agatcgccgc gctgggtcatt gacaatggct ccggcatgtg caaagctggt 60
162 tttgctgggg acgacgctcc ccgagccgtg ttctcttcca tcgtcgggcg cccagacac 120
164 cagggcgctca tgggtgggcat gggccagaag gactcctacg tgggcgacga ggcccagagc 180
166 aagcgtggca tcctgaccct gaagtacccc attgagcatg gcatcgtcac caactgggac 240
168 gacatggaga agatctggca ccacaccttc tacaacgagc tgcgcgtggc cctggaggag 300
170 caccagtgct tgctgaccga ggccccctcg aacccaagg ccaacagaga gaagatgact 360

```

RAW SEQUENCE LISTING

DATE: 10/03/2005

PATENT APPLICATION: US/10/549,831

TIME: 14:30:43

Input Set : A:\S80668522.ST25.txt

Output Set: N:\CRF4\10032005\J549831.raw

```

172 cagattatgt ttgagacctt caacaccccg gccatgtacg tggccatcca ggccgtgctg      420
174 tccctctacg cctctgggcg caccactggc attgtcatgg actctggaga cggggtcacc      480
176 cacacggtgc ccatctacga gggctacgcc ctccccacg ccatcctgcg tctggacctg      540
178 gctggccggg acctgaccga ctacctcatg aagatcctca ctgagcgagg ctacagcttc      600
180 accaccacgg ccgagcggga aatcgtgcgc gacatcaagg agaagctgtg ctacgtcgcc      660
182 ctggacttcg agcaggagat ggccaccgcc gcacctcct cttctctgga gaagagctac      720
184 gagctgcccg atggccagggt catcaccatt ggcaatgagc ggttcgggtg tccggaggcg      780
186 ctgttccagc cttccttctt ggggatggaa tcttgccgca tccacgagac caccttcaac      840
188 tccatcatga agtgtgacgt ggacatccgc aaagacctgt acgccaacac ggtgctgtcg      900
190 ggcggcacca ccatgtaccc gggcattgcc gacaggatgc agaaggagat caccgccctg      960
192 gcgcccagca ccatgaagat caagatcatc gcacccccag agcgcaagta ctcggtgtgg     1020
194 atcggtggct ccatcctggc ctcaactgtc accttccagc agatgtggat tagcaagcag     1080
196 gagtacgacg agtcggggcc ctccatcgtc caccgcaaat gcttctaaac ggactcagca     1140
198 gatgcgtagc atttgcgtgc tgggttaatt gagaatagaa atttgccctt ggcaaatgca     1200
200 cacacctcat gctagcctca cgaaactgga ataagccttc gaaaagaaat tgtccttgaa     1260
202 gcttgatatc gatatcagca ctggattgta gaacttggtg ctgattttga ccttgatttg     1320
204 aagttaactg ttcccccttg tatttgttta atacctgta catatctttg agttcaacct     1380
206 ttagtacgtg tggcttggtc acttcgtggc taaggtaaga acgtgcttgt ggaagacaag     1440
208 tctgtggctt ggtgagctcg tgtggccagc agcctctgat ctgtgcaggg tattaacgtg     1500
210 tcagggctga gtgttctggg atttctctag aggctggcaa gaaccagttg tttgtcttg     1560
212 cgggtctgtc aggggttgaa agtccaagcc gtaggaccca gtttctttt ttagctgatg     1620
214 tctttggcca gaacaccgtg ggctgttact tgctttgagt tgggaagcgg ttgcatttac     1680
216 gctgttaa atgtattcatt ttaatttatg taagggtttt tttgtacgca attctcgatt     1740
218 ctttgaagag atgacaacaa attttggttt tctactgtta tgtgagaaca ttaggccccca     1800
220 gcaacacgtc attgtgtaag gaaaaataaa agtgcgtgcc taacc                      1845
223 <210> SEQ ID NO: 4
224 <211> LENGTH: 1845
225 <212> TYPE: DNA
226 <213> ORGANISM: Homo sapiens
228 <400> SEQUENCE: 4
229 atggaagaag agatcgccgc gctggtcatt gacaatggct ccggcatgtg caaagctggt      60
231 tttgctgggg acgacgtcc ccgagccgtg tttccttcca tcgtcgggcg ccccgacac      120
233 cagggcgtca tgggtgggcat gggccagaag gactcctacg tgggcgacga ggcccagagc      180
235 aagcgtggca tctgaccct gaagtacccc attgagcatg gcacgtcac caactgggac      240
237 gacatggaga agatctggca ccacacctt tacaacgagc tgcgcgtggc cccggaggag      300
239 caccagtgct tgcgtgaccga ggccccctg aaccccagg ccaacagaga gaagatgact      360
241 cagattatgt ttgagacctt caacaccccg gccatgtacg tggccatcca ggccgtgctg      420
243 tccctctacg cctctgggcg caccactggc attgtcatgg actctggaga cggggtcacc      480
245 cacatggtgc ccatctacga gggctacgcc ctccccacg ccatcctgcg tctggacctg      540
247 gctggccggg acctgaccga ctacctcatg aagatcctca ctgagcgagg ctacagcttc      600
249 accaccacgg ccgagcggga aatcgtgcgc gacatcaagg agaagctgtg ctacgtcgcc      660
251 ctggacttcg agcaggagat ggccaccgcc gcacctcct cttctctgga gaagagctac      720
253 gagctgcccg atggccagggt catcaccatt ggcaatgagc ggttcgggtg tccggaggcg      780
255 ctgttccagc cttccttctt ggggatggaa tcttgccgca tccacgagac caccttcaac      840
257 tccatcatga agtgtgacgt ggacatccgc aaagacctgt acgccaacac ggtgctgtcg      900
259 ggcggcacca ccatgtaccc gggcattgcc gacaggatgc agaaggagat caccgccctg      960
261 gcgcccagca ccatgaagat caagatcatc gcacccccag agcgcaagta ctcggtgtgg     1020
263 atcggtggct ccatcctggc ctcaactgtc accttccagc agatgtggat tagcaagcag     1080
265 gagtacgacg agtcggggcc ctccatcgtc caccgcaaat gcttctaaac ggactcagca     1140

```

RAW SEQUENCE LISTING

DATE: 10/03/2005

PATENT APPLICATION: US/10/549,831

TIME: 14:30:43

Input Set : A:\S80668522.ST25.txt

Output Set: N:\CRF4\10032005\J549831.raw

```

267 gatgcgtagc atttgctgca tgggttaatt gagaatagaa atttgcccct ggcaaagtca 1200
269 cacacctcat gctagcctca cgaaactgga ataagccttc gaaaagaaat tgtccttgaa 1260
271 gcttgatatct gatatcagca ctggattgta gaacttggtg ctgattttga ccttgatttg 1320
273 aagttaactg ttcccccttg tatttgttta ataccttgta catatctttg agttcaacct 1380
275 ttagtacgtg tggcttggtc acttcgtggc taaggtaaga acgtgcttgt ggaagacaag 1440
277 tctgtggctt ggtgagtcgt tgtggccagc agcctctgat ctgtgcaggg tattaacgtg 1500
279 tcagggctga gtgttctggg atttctctag aggctggcaa gaaccagttg ttttgtcttg 1560
281 cgggtctgtc aggggtggaa agtccaagcc gtaggaccca gtttcctttc ttagctgatg 1620
283 tctttggcca gaacaccgtg ggctgttact tgctttgagt tgggaagcggg ttgcatttac 1680
285 gcctgtaaat gtattcattc ttaatttatg taagggtttt tttgtacgca attctcgatt 1740
287 ctttgaagag atgacaacaa attttggttt tctactgtta tgtgagaaca ttaggcccc 1800
289 gcaacacgtc attgtgtaag gaaaaataaa agtgctgccg taacc 1845
292 <210> SEQ ID NO: 5
293 <211> LENGTH: 375
294 <212> TYPE: PRT
295 <213> ORGANISM: Homo sapiens
297 <400> SEQUENCE: 5
299 Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met
300 1 5 10 15
303 Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro
304 20 25 30
307 Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly
308 35 40 45
311 Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile
312 50 55 60
315 Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp
316 65 70 75 80
319 Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val
320 85 90 95
323 Ala Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro
324 100 105 110
327 Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn
328 115 120 125
331 Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala
332 130 135 140
335 Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr
336 145 150 155 160
339 His Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu
340 165 170 175
343 Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr His Tyr Leu Met Lys Ile
344 180 185 190
347 Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile
348 195 200 205
351 Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu
352 210 215 220
355 Gln Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu Glu Lys Ser Tyr
356 225 230 235 240
359 Glu Leu Pro Asp Gly Gln Val Ile Thr Ile Gly Asn Glu Arg Phe Arg
360 245 250 255

```

RAW SEQUENCE LISTING

DATE: 10/03/2005

PATENT APPLICATION: US/10/549,831

TIME: 14:30:43

Input Set : A:\S80668522.ST25.txt

Output Set: N:\CRF4\10032005\J549831.raw

```

363 Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe Leu Gly Met Glu Ser Cys
364          260                      265                      270
367 Gly Ile His Glu Thr Thr Phe Asn Ser Ile Met Lys Cys Asp Val Asp
368          275                      280                      285
371 Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly Thr Thr
372          290                      295                      300
375 Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Lys Glu Ile Thr Ala Leu
376 305          310                      315                      320
379 Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu Arg Lys
380          325                      330                      335
383 Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe
384          340                      345                      350
387 Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr Asp Glu Ser Gly Pro Ser
388          355                      360                      365
391 Ile Val His Arg Lys Cys Phe
392          370                      375
395 <210> SEQ ID NO: 6
396 <211> LENGTH: 375
397 <212> TYPE: PRT
398 <213> ORGANISM: Homo sapiens
400 <400> SEQUENCE: 6
402 Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met
403 1          5          10          15
406 Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro
407          20          25          30
410 Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly
411          35          40          45
414 Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile
415          50          55          60
418 Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp
419 65          70          75          80
422 Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val
423          85          90          95
426 Ala Pro Glu Glu His Pro Leu Leu Leu Thr Glu Ala Pro Leu Asn Pro
427          100         105         110
430 Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn
431          115         120         125
434 Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala
435          130         135         140
438 Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr
439 145          150         155         160
442 His Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu
443          165         170         175
446 Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr Asp Tyr Leu Met Lys Ile
447          180         185         190
450 Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile
451          195         200         205
454 Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu
455          210         215         220

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/549,831

DATE: 10/03/2005

TIME: 14:30:44

Input Set : A:\S80668522.ST25.txt

Output Set: N:\CRF4\10032005\J549831.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date